





## 1085-019

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Erich Frauendorfer

Group Art Unit: Not yet known

Serial No.: 10/052,228

Examiner: Not yet known

Filed: January 18, 2002

For: PROCESS FOR THE PRODUCTION OF POLYURETHANES AND/OR POLYUREAS

USING AMINE-N-OXIDE CATALYSTS AND COMPOUNDS CONTAINING AMINE-

**N-OXIDES** 

Hon. Commissioner of Patents and Trademarks

Washington, D.C. 20231

New York, NY 10036 April 30, 2002

# PRELIMINARY AMENDMENT

Sir:

Before calculation of the claims fee, please amend the above-identified application as follows:

## CERTIFICATE OF MAILING BY EXPRESS MAIL

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I hereby certify that this paper or fee is being deposited with the United States Postal Service by "Express Mail Post Office to Addressee" Service under 37 CFR §1.10 on the date indicated above and is addressed to

Box PATENT APPLICATION sistant Commissioner of Patents

(Siganture of Person Mailing Paper or Fee)

Alan B. Clement, Registration No. 34,563

(Typed or Printed Name of Person Mailing)

#### IN THE CLAIMS

Please amend Claims 4-11 and 13 in accordance with the provisions of 37 C.F.R § 1.121(c)(1)(i).

- 4. (Amended) Process according to Claim 1, characterized by the fact that the amine oxide shows at least one residue linked to the nitrogen atoms with β-hydrogen atom, in particular –CH<sub>2</sub>-CH<sub>2</sub>-.
- 5. (Amended) Process according to Claim 1, characterized by the fact that the amine oxide is selected from the group consisting of triethylamine-N-oxide, N-ethylmorpholine-N-oxide, N-methylmorpholine-N-oxide, diethyloctylamine-N-oxide, dimethylcyclohexylamine-N-oxide, ethyldicyclohexyl-amine-N-oxide, N,N,N',N'-tetra-ethyl-bisaminoethyl ether-di-N,N'-oxide, diethylcyclo-hexylamine-N-oxide and diethylpiperzine-N-oxide.
- 6. (Amended) Process according to Claim 1, characterized by the fact that the amine oxide is used at 0.01 to 5% by wt., preferentially at 0.05 to 1% by wt., based on the weight of compounds with reactive hydrogen atoms used.
- 7. (Amended) Process according to Claim 1, characterized by the fact that the compounds containing at least two reactive hydrogen atoms consist mainly of a polyether with at least two free hydroxy groups.
- 8. (Amended) Process according to Claim 1, characterized by the fact that additionally metal salts of organic compounds can be used as catalysts.
- 9. (Amended) Process according to Claim 1, characterized by the fact that besides the amine oxides no tertiary amine catalysts are used.
- 10. (Amended) Process according to Claim 1, characterized by the fact that besides the amine oxides no further polyurethane/polyurea catalysts are used.
- 11. (Amended) Composition containing the components (A), (B) and (C) according to Claim 1.
- 13. (Amended) Use of the composition according to claim 11 for production of polyurethane foams, polyurethane adhesives or polyurethane coatings.

## **REMARKS**

Before calculating the claim fee due in this application, please enter the above amendments to remove multiple dependencies. A marked up version of the claims in accordance with 37 C.F.R. 1.121(c)(1)(ii) is attached.

Respectfully submitted,

Alan B. Clement

Registration No. 34,563

# **MAILING ADDRESS**

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# 37 C.F.R. 1.121(c)(1)(ii) ATTACHMENT

- 4. (Amended) Process according to [one of the preceding claims] Claim 1, characterized by the fact that the amine oxide shows at least one residue linked to the nitrogen atoms with β-hydrogen atom, in particular –CH<sub>2</sub>-CH<sub>2</sub>-.
- 5. (Amended) Process according to [one of the preceding claims] Claim 1, characterized by the fact that the amine oxide is selected from the group consisting of triethylamine-N-oxide, N-ethylmorpholine-N-oxide, N-methylmorpholine-N-oxide, diethyloctylamine-N-oxide, dimethylcyclohexylamine-N-oxide, ethyldicyclohexyl-amine-N-oxide, N,N,N',N'-tetra-ethyl-bisaminoethyl ether-di-N,N'-oxide, diethylcyclo-hexylamine-N-oxide and diethylpiperzine-N-oxide.
- 6. (Amended) Process according to [one of the preceding claims] Claim 1, characterized by the fact that the amine oxide is used at 0.01 to 5% by wt., preferentially at 0.05 to 1% by wt., based on the weight of compounds with reactive hydrogen atoms used.
- 7. (Amended) Process according to [one of the preceding claims] Claim 1, characterized by the fact that the compounds containing at least two reactive hydrogen atoms consist mainly of a polyether with at least two free hydroxy groups.
- 8. (Amended) Process according to [one of the preceding claims] Claim 1, characterized by the fact that additionally metal salts of organic compounds can be used as catalysts.
- 9. (Amended) Process according to [one of the preceding claims] Claim 1, characterized by the fact that besides the amine oxides no tertiary amine catalysts are used.
- 10. (Amended) Process according to [on of the claims 1 to 7] Claim 1, characterized by the fact that besides the amine oxides no further polyurethane/polyurea catalysts are used.
- 11. (Amended) Composition containing the components (A), (B) and (C) according to [one of the preceding claims] Claim 1.
- 13. (Amended) Use of the composition according to claim 11 [or 12] for production of polyurethane foams, polyurethane adhesives or polyurethane coatings.